Storm Water Pollution Prevention Plan (SWPPP)
Acceptable Temporary Controls During Construction

All temporary BMPs must be removed after final stabilization is achieved.

Preferred Method of preservation of existing vegetation:
- Temporary chain-link fencing installed to protect the vegetation

Stabilized construction entrance
- All construction entrances shall be stabilized with rock or other non-erodable material.
- If rock is used, the minimum effective diameter shall be 3 inches.
- Entrances shall be placed at high points or other areas where runoff from the construction site will not be directed to the entrance.
- The construction entrance shall not extend into the street or block flow in the gutter.

EROSION CONTROL

Vegetated buffer strips
- May consist of preserved or planted vegetation.
- The strip shall be at least 10 feet wide and flagged or otherwise designated in the field to prevent disturbance. Wider strips shall be specified when the slope is steeper than 10H:1V.
- If existing vegetation is used, it may be removed at the end of the project for establishment of permanent landscaping.
- The following design criteria shall be met when using vegetated buffer strips:
  1. The drainage area shall not exceed 0.25 acres per 100 feet length of vegetation.
  2. The maximum distance of flow to the vegetated buffer shall be 100 feet or less.
  3. The maximum up-slope grade perpendicular to the vegetated buffer shall not exceed 5H:1V.

Staked hay bales
- Only acceptable as a perimeter control for sheet flow on the down-slope side of the construction site.
- The ends of the line of bales shall be turned up-slope, perpendicular to the contours, to form a sediment trap.
- Bales shall not be placed across swales or other areas of concentrated flow or be placed in front of curb inlets.
- The following design criteria shall be met when using staked hay bales:
  1. The drainage area shall not exceed 0.25 acres per 100 feet of bale length.
  2. For slopes of 3H:1V and flatter, the maximum distance of flow to the staked hay bales shall be 100 feet or less.
  3. For slopes of 3H:1V and steeper, the maximum distance of flow to the staked hay bales shall be 20 feet.
  4. The maximum up-slope grade perpendicular to the line of bales shall not exceed 1H:1V.

Soil retention blankets
- Shall be anchored per the manufacturer's recommendations.
- On lots with slopes of 3H:1V or flatter, the blanketed area shall be at least 8 feet wide. Greater widths and additional BMPs shall be specified on steeper slopes.
- The blankets shall be seeded if used for temporary stabilization before start of home construction.
- Soil retention blankets used in channels shall meet TxDOT requirements for Type E-H blankets, as appropriate.

Silt fence

- Shall have wire mesh backing and be supported by metal posts.
- When used as a perimeter control, they shall only be placed down-slope from the construction activity, with the ends turned up-slope, perpendicular to the contours, to form a sediment trap.
- Silt fences may be used for concentrated flows up to a maximum design flow rate of 0.5 cfs.
- The following design criteria shall be met when using silt fence:
  1. The drainage area shall not exceed 0.25 acres per 100 feet of fence length.
  2. For slopes between 50H:1V and 3H:1V, the maximum distance of flow to the silt fence shall be 100 feet or less.
  3. For slopes of 3H:1V and steeper, the maximum distance of flow to the silt fence shall be 20 feet.
  4. The maximum up-slope grade perpendicular to the fence line shall not exceed 1H:1V.

Curb inlet protection

- Inlet protection is the least desirable BMP. It will only be accepted for use on private streets and on public streets when no other BMP is viable.
- Inlet inserts must be configured to pass the inlet's design flows without causing flooding.
- Temporary inlet inserts shall be used unless a written request to use other measures is submitted to and approved by the Director.

Temporary detention structure

- If 10 acres or more drain to a common drainage point, the low area shall be excavated as a temporary detention structure while the drainage facilities are being constructed.
- This practice is advisable on smaller drainage areas where practicable.

Rock check dams

- Rock check dams are appropriate for areas of concentrated flow such as swales and ditches and at the outfall for a subdivision.
- Rock shall be contained within wire mesh.
- Check dams shall be placed at a spacing that sets the top elevation of a dam at the toe elevation of the next upstream dam, with the top of the furthest upstream dam set at the invert of the last stabilized portion of the swale or ditch.
- When check dams are used as an outfall control, the first check dam shall be at least 10 feet from the outfall, but no further than 50 feet from the outfall.

Earthen berms

- Earthen berms may be used as a perimeter control to divert runoff from adjacent sites away from the development or to retain runoff within the development.
- Earthen berms shall be stabilized within 14 days of their construction.

Fibrous mulch

- Fibrous mulch may be used as an erosion control to limit the runoff from disturbed areas within the development.
- Mulch shall be at least 3 inches thick and cover all disturbed areas.
- When used on slopes of 3H:1V or steeper and in critical areas such as waterways, mulch matting must be anchored with netting to hold it in place.

Hydromulch

- Hydromulch stabilization may be used as an alternative to seeding for erosion control when all disturbed area is covered by the hydromulch.
- A strip of hydromulch is not acceptable unless additional structural controls are provided.

APPLICABLE REGULATIONS AND ORDINANCES

Construction activities shall comply with the SWPPP requirements in Article IV, Storm Water Discharges from Construction Activities, of the Storm Water Pollution Control Ordinance and the appropriate federal (Environmental Protection Agency) and state (Texas Commission on Environmental Quality) regulations. When the ordinance and applicable regulations are in conflict, the most stringent requirements shall apply.

Structural Best Management Practices (BMPs) shall comply with details and specifications in the latest edition of the NCTCOG BMP Manual titled *"Storm Water Quality Best Management Practices for Construction Activities"* and this manual. When the NCTCOG Manual and this manual are in conflict, this manual shall govern. The SWPPP shall provide a series of changing BMPs that are appropriate for each phase of construction. The SWPPP shall also identify which owner/operator is responsible for installing, inspecting and maintaining each BMP during the different phases of construction.